Author Index

Volume 80, January-June 1997

Abboud FM, 861
Abran D, 463
Albat B, 377
Alexander RW, 838
Alper SL, 617
Alyonycheva T, 665
Ambrosio G, 743
Andrés V, 418, 452
Angst BD, 88
Aoki H, 228
Arras M, 829
Ashraf M, 790
Atar D, 393
Auchampach JA, 800

Babenko A, 589
Bache RJ, 196
Bährend E, 427
Balser C, 69
Barone FC, 894
Bates EJ, 149
Becker LC, 76
Bein K, 617
Bénardeau A, 345
Benessiano J, 189
Berk BC, 607
Berliner JA, 810
Bernstein KE, 514
Berrington WR, 838
Bers DM, 82
Bhalla RC, 861
Blackstad TW, 400
Bobik A, 179
Bolli R, 730, 800
Bonen A, 400
Bonne G, 427
Bonnet J, 159
Bouhour J-B, 427
Boutjdir M, 354, 720
Brandes R, 82
Briggs WH, 28
Brozovich F, 885
Buck SH, 655
Buckingham M, 751
Bukauskas FF, 708
Buyon JP, 354

Campbell WB, 877
Capers Q IV, 45, 838
Carew TE, 208
Carmona R, 312
Carrier L, 427
Chahine M, 363
Chan BMC, 627
Chapleau MW, 861
Chau T, 627
Chemtob S, 463
Chen AFY, 327
Chen L, 354, 720
Chen L-Q, 363
Chen X-LL, 305
Cheng GC, 28
Chiariello M, 743
Chilian WM, 320
Chisolm GM, 37
Chow LH, 627
Christodoulides N, 557
Clowes AW, 490
Clozel J-P, 219
Cohen IS, 261
Cohen-Gould L, 665
Cook J, 542
Cooklin M, 765
Cooper G IV, 281
Corson MA, 607
Couffinhal T, 159
Crossman DC, 520
Crotty TB, 327
Cruaud C, 427
Cuda G, 688
Cullen MJ, 269
Cumberland DC, 520
Curtiss LK, 819
Czachurski J, 565

D'Andrea D, 743
Dart AM, 179
Davies JE, 853
Davis MJ, 320
Daw JR, 370
De Chamisso P, 345
de Leon H, 45, 514
De Simone C, 743
Dean RH, 497
Dell'Era P, 845
DeRuiter MC, 444, 473
Desnos M, 427
DiDonato F, 354
Dixon JE, 261
Drake TA, 810
Du X-J, 179
Duan D, 103
Dubourg O, 427
Dufourcq P, 159
Dumont I, 463
Duncker DJ, 196
Duplàa C, 159
Durante W, 557

Eberhardt RT, 551
Ellis CG, 627
El-Sherif N, 354, 720
Emanuel BS, 437
Endege WO, 532
Eramo N, 743
Esler MD, 179
Esposito A, 743
Evans RM, 757

Fang Z-T, 810
Farb A, 542
Fei H, 242
Feng J, 572
Ferrante A, 149
Ferrante JV, 149
Feuvray D, 253
Fischli W, 219
Fischman DA, 665
Fish J, 627
Fisher SA, 885
Fiszman M, 427
Ford CM, 627
Forough R, 490
Foster LC, 532
Foy RA, 21
Frame LH, 242
Francis SE, 520
Freeman BA, 838
Frenkel PA, 435
Fry CH, 765
Fukui T, 45, 838

Gamble J, 482
Gao WD, 393
Gardner DG, 580
Gary F, 427
Geary RL, 497
George AL Jr, 370
Gerson DS, 28
Gibbs GG, 62
Giguere V, 757
Gintant GA, 261
Gittenberger-de Groot AC, 444, 473
Goldberg IJ, 819
Goldmuntz E, 437
Goresky CA, 645
Gourdie RG, 88
Granger HJ, 845
Gray ML, 28
Greene AS, 312
Griendling KK, 45, 838
Grodzinsky AJ, 28
Grohmann M, 520
Gulick J, 655
Gunn J, 520

Haber E, 532
Hagège AA, 427
Haigney MCP, 699
Hainque B, 427
Haist JV, 95
Hamm-Alvarez SF, 52
Hanna MS, 242
Hara PS, 497
Hardy P, 463
Harrer JM, 506
Harrison DG, 45, 838
Hartley SA, 170
Hasenstab D, 490
Hatem SN, 345
Henrion D, 189
Hewett TE, 655
Higashiyama S, 638
Hii CST, 149
Hintze TH, 868
Hirono S, 11
Hogers B, 473
Hoh CK, 62
Holt CM, 520
Homcy CJ, 297
Hoque ANE, 95
Houle F, 383
Hsieh C-M, 532
Hu NN, 370
Huang ZH, 149
Hume JR, 103
Huot J, 383
Husain M, 617

Ikebe M, 885
Imai S, 11
Ingber DE, 281
Ishibashi Y, 196
Ishikawa Y, 297
Ishizaka N, 45
Islam MO, 11
Isner JM, 418, 452
Ito WD, 829
Izumi T, 11
Izumo S, 228

Jiang L, 617
Jóhannsson E, 400
Johnson JA, 720
Jongsma HJ, 673

Kallen RG, 363
Kalya A, 730
Kanatsuka H, 1
Karmazyn M, 95
Katusic ZS, 327
Kearney M, 418
Kedes L, 52
Kelly MP, 853
Kelly R, 751
Kentish JC, 682
Khan LUR, 88
Kinoshita H, 327
Kiowski W, 219
Kita T, 638
Klevitsky R, 655
Kodama M, 11
Kolmerer B, 290
Komajda M, 427
Komaru T, 1
Komuro I, 139
Kovacic-Milivojevic B, 580
Koyama H, 408
Kozlowski RZ, 170
Kranias EG, 506
Krasinski K, 418
Krieger JE, 312
Kroll MH, 557
Kudoh S, 139
Kumagai T, 1
Kume N, 638
Kwak BR, 673

Labeit S, 290, 427
Laderoute KR, 336
Ladilov YV, 69
Lagadic-Gossmann D, 253
Lakatta EG, 688
Lalli J, 506
Landry J, 383
Lankford EB, 688
Laurin MA, 627
Laursen JB, 45, 838
Le Prigent K, 253
Ledda F, 845
Lee M-E, 532
Lee RT, 28

Author Index

Volume 80, January-June 1997

Abboud FM, 861
Abran D, 463
Albat B, 377
Alexander RW, 838
Alper SL, 617
Alyonycheva T, 665
Ambrosio G, 743
Andrés V, 418, 452
Angst BD, 88
Aoki H, 228
Arras M, 829
Ashraf M, 790
Atar D, 393
Auchampach JA, 800

Babenko A, 589
Bache RJ, 196
Bährend E, 427
Balser C, 69
Barone FC, 894
Bates EJ, 149
Becker LC, 76
Bein K, 617
Bénardeau A, 345
Benessiano J, 189
Berk BC, 607
Berliner JA, 810
Bernstein KE, 514
Berrington WR, 838
Bers DM, 82
Bhalla RC, 861
Blackstad TW, 400
Bobik A, 179
Bolli R, 730, 800
Bonen A, 400
Bonne G, 427
Bonnet J, 159
Bouhour J-B, 427
Boutjdir M, 354, 720
Brandes R, 82
Briggs WH, 28
Brozovich F, 885
Buck SH, 655
Buckingham M, 751
Bukauskas FF, 708
Buyon JP, 354

Campbell WB, 877
Capers Q IV, 45, 838
Carew TE, 208
Carmona R, 312
Carrier L, 427
Chahine M, 363
Chan BMC, 627
Chapleau MW, 861
Chau T, 627
Chemtob S, 463
Chen AFY, 327
Chen L, 354, 720
Chen L-Q, 363
Chen X-LL, 305
Cheng GC, 28
Chiariello M, 743
Chilian WM, 320
Chisolm GM, 37
Chow LH, 627
Christodoulides N, 557
Clowes AW, 490
Clozel J-P, 219
Cohen IS, 261
Cohen-Gould L, 665
Cook J, 542
Cooklin M, 765
Cooper G IV, 281
Corson MA, 607
Couffinhal T, 159
Crossman DC, 520
Crotty TB, 327
Cruaud C, 427
Cuda G, 688
Cullen MJ, 269
Cumberland DC, 520
Curtiss LK, 819
Czachurski J, 565

D'Andrea D, 743
Dart AM, 179
Davies JE, 853
Davis MJ, 320
Daw JR, 370
De Chamisso P, 345
de Leon H, 45, 514
De Simone C, 743
Dean RH, 497
Dell'Era P, 845
DeRuiter MC, 444, 473
Desnos M, 427
DiDonato F, 354
Dixon JE, 261
Drake TA, 810
Du X-J, 179
Duan D, 103
Dubourg O, 427
Dufourcq P, 159
Dumont I, 463
Duncker DJ, 196
Duplàa C, 159
Durante W, 557

Eberhardt RT, 551
Ellis CG, 627
El-Sherif N, 354, 720
Emanuel BS, 437
Endege WO, 532
Eramo N, 743
Esler MD, 179
Esposito A, 743
Evans RM, 757

Fang Z-T, 810
Farb A, 542
Fei H, 242
Feng J, 572
Ferrante A, 149
Ferrante JV, 149
Feuvray D, 253
Fischli W, 219
Fischman DA, 665
Fish J, 627
Fisher SA, 885
Fiszman M, 427
Ford CM, 627
Forough R, 490
Foster LC, 532
Foy RA, 21
Frame LH, 242
Francis SE, 520
Freeman BA, 838
Frenkel PA, 435
Fry CH, 765
Fukui T, 45, 838

Gamble J, 482
Gao WD, 393
Gardner DG, 580
Gary F, 427
Geary RL, 497
George AL Jr, 370
Gerson DS, 28
Gibbs GG, 62
Giguere V, 757
Gintant GA, 261
Gittenberger-de Groot AC, 444, 473
Goldberg IJ, 819
Goldmuntz E, 437
Goresky CA, 645
Gourdie RG, 88
Granger HJ, 845
Gray ML, 28
Greene AS, 312
Griendling KK, 45, 838
Grodzinsky AJ, 28
Grohmann M, 520
Gulick J, 655
Gunn J, 520

Haber E, 532
Hagège AA, 427
Haigney MCP, 699
Hainque B, 427
Haist JV, 95
Hamm-Alvarez SF, 52
Hanna MS, 242
Hara PS, 497
Hardy P, 463
Harrer JM, 506
Harrison DG, 45, 838
Hartley SA, 170
Hasenstab D, 490
Hatem SN, 345
Henrion D, 189
Hewett TE, 655
Higashiyama S, 638
Hii CST, 149
Hintze TH, 868
Hirono S, 11
Hogers B, 473
Hoh CK, 62
Holt CM, 520
Homcy CJ, 297
Hoque ANE, 95
Houle F, 383
Hsieh C-M, 532
Hu NN, 370
Huang ZH, 149
Hume JR, 103
Huot J, 383
Husain M, 617

Ikebe M, 885
Imai S, 11
Ingber DE, 281
Ishibashi Y, 196
Ishikawa Y, 297
Ishizaka N, 45
Islam MO, 11
Isner JM, 418, 452
Ito WD, 829
Izumi T, 11
Izumo S, 228

Jiang L, 617
Jóhannsson E, 400
Johnson JA, 720
Jongsma HJ, 673

Kallen RG, 363
Kalya A, 730
Kanatsuka H, 1
Karmazyn M, 95
Katusic ZS, 327
Kearney M, 418
Kedes L, 52
Kelly MP, 853
Kelly R, 751
Kentish JC, 682
Khan LUR, 88
Kinoshita H, 327
Kiowski W, 219
Kita T, 638
Klevitsky R, 655
Kodama M, 11
Kolmerer B, 290
Komajda M, 427
Komaru T, 1
Komuro I, 139
Kovacic-Milivojevic B, 580
Koyama H, 408
Kozlowski RZ, 170
Kranias EG, 506
Krasinski K, 418
Krieger JE, 312
Kroll MH, 557
Kudoh S, 139
Kumagai T, 1
Kume N, 638
Kwak BR, 673

Labeit S, 290, 427
Laderoute KR, 336
Ladilov YV, 69
Lagadic-Gossmann D, 253
Lakatta EG, 688
Lalli J, 506
Landry J, 383
Lankford EB, 688
Laurin MA, 627
Laursen JB, 45, 838
Le Prigent K, 253
Ledda F, 845
Lee M-E, 532
Lee RT, 28

Lee RY, 757
Lee SJ, 542
Lee W-S, 532
Leonard JC, 497
Leskinen H, 114
Lévy BI, 189
Li D-Y, 463
Li G-R, 572
Li P-L, 877
Libby P, 28
Linke WA, 290
Little PJ, 179
Liu Y, 393
Liva SM, 810
Llanas B, 159
Lopaschuk GD, 482
Lou P, 838
Luo J, 757
Luo W, 506
Lynch CM, 497
Lyons GE, 452

Magee AI, 88
Maggi CA, 845
Majesky MW, 601
Makinde A-O, 482
Maldonado C, 800
Marban E, 393
Marceau F, 383
Marcotte P, 363
Markwald RR, 444
Martin F, 514
Marty I, 345
Mashburn AB, 370
McCarthy PM, 772
McCullagh KJA, 400
McDonald J, 542
McKinnon D, 261
Mebazaa A, 688
Medford RM, 305
Mercadier J-J, 345
Middlekauff HR, 62
Mikawa T, 665
Min DH, 542
Mironov V, 444
Miyawaki H, 790
Mizuno T, 139
Mochly-Rosen D, 720
Molotchnikoff S, 463
Moreau C, 159
Mori I, 838
Moriwaki H, 638
Morris A, 354
Mory P, 219
Moss RL, 655
Muller JM, 320
Murphy AM, 393
Murray KT, 370

Nagelhus EA, 400
Nakazawa M, 11
Nargeot J, 377
Narishige T, 281
Nattel S, 103, 572
Nerbonne JM, 772
Newman CMH, 520
Ng LL, 853
Nguyen AH, 62
Niel F, 427
Nishi E, 638
Nitzsche EU, 62

O'Brien T, 327
Ocampo CJ, 699
Ochi H, 638
Ochoa M, 868
Olliff L, 305
Olson EN, 604
Ottersen OP, 400

Palmer S, 682
Parandoosh Z, 542
Parenti A, 845
Parhami F, 810
Park S-W, 730
Paul RJ, 21, 506
Penn MS, 37
Pepper CB, 688
Perez NG, 393
Peri K, 463
Perrella MA, 532
Peyton KJ, 557
Pickering JG, 627
Pierce GF, 542
Piper HM, 69
Poelmann RE, 444, 473
Pompili VJ, 327
Pond AL, 772
Poulos A, 149
Presta M, 845
Pritchard KA Jr, 312

Qiu Y, 730, 800
Quignard J-F, 377
Quinn PA, 853

Rajagopalan S, 45, 838
Rangaswamy S, 37
Rashbaum W, 354
Reidy MA, 408
Rein J, 219
Rezai AA, 819
Richard P, 427
Richard S, 377
Rieder MJ, 312
Rizvi A, 800
Robbins J, 655
Robinson BS, 149
Robotham JL, 688
Roden DM, 782
Rosenberg RD, 617
Rothery S, 88, 269
Rücker-Martin C, 345
Rudy Y, 124
Runge MS, 838
Ruskoaho H, 114
Rutledge JC, 819
Ryckwaert F, 377

Sadoshima J, 228
Sage EH, 532
Saidel GM, 37
Sato K, 1
Schafer AI, 557
Schaper J, 829
Schaper W, 829
Schatteman G, 452
Schiaffino S, 749
Schirm S, 452
Schneider MD, 435
Scholz D, 829
Schwab AJ, 645
Schwartz K, 427
Schwartz SM, 601
Scognamiglio A, 743
Scott NA, 514
Sejersted OM, 400
Seller H, 565
Sellers JR, 688
Severs NJ, 88, 269
Shah AM, 688
Sharma RV, 861
Shaw RM, 124
Shepherd L, 520
Sheridan DJ, 765
Shibata A, 11
Shimizu S, 21
Shin H-G, 370
Shiojima I, 139
Shirato K, 1
Sibinga NES, 532
Siegmund B, 69
Siewert C, 665
Silverman HS, 699
Simard A, 645
Simonet L, 514
Simons M, 617
Skopicki HA, 452
Smith RC, 452
Snyders DJ, 782
Sollott SJ, 688
Spector DJ, 327
Stern MD, 699
Stevenson S, 269
Sucov HM, 757
Sugimura A, 1
Sullivan MJ, 861
Sun J-Z, 730
Sussman MA, 52

Tagawa H, 281
Takekoshi N, 139
Tang X-L, 730, 800
Taniguchi N, 638
Tanikawa T, 1
Taylor WR, 45, 838
te Welscher PHJA, 673
Territo MC, 810
Teschner S, 800
Thompson RP, 88
Tozer EC, 208
Trent RJ, 427
Trimmer JS, 772
Tritto I, 743
Tseng C-E, 354
Tsutsui M, 327
Tummala PE, 305
Turino M, 219
Tyner TR, 810

Uniyal S, 627

Valiunas V, 708
van Kempen MJA, 673
Van Wagoner DR, 772
VanMunsteren JC, 444
Varma DR, 463
Vassort G, 589
Verheule S, 673
Vilalta PM, 52
Villaz M, 345
Violante A, 743
Virmani R, 542
Vogt P, 219
von Andrian L, 551
Vora DK, 810
Vuolteenaho O, 114

Wachtel RE, 861
Waite LJ, 861
Wakatsuki Y, 638
Wallis WRJ, 765
Walsh K, 418, 452
Walsh RA, 295
Wang N, 281
Wang Z, 572
Ware JA, 551
Watson AD, 810
Watson MT, 370
Webster KA, 336
Wei GL, 418
Wei S-k, 699
Weingart R, 708
Welch S, 52
Whitely K, 88
Wible B, 572
Wilcox JN, 45, 514
Williams JK, 497
Winkler B, 829
Wolny A, 219
Woo MM, 819
Wymore RS, 261
Wymore RT, 261

Xu KY, 76
Xu X, 868

Yamazaki T, 139
Yang T, 782
Yang Z-K, 688
Yazaki Y, 139
Yazmajian D, 242
Yokota R, 551
Yoshida Y, 11
Yu B, 427
Yukawa M, 551

Zanzinger J, 565
Zhang X, 868
Zhang Z-H, 354, 720
Zhao G, 868
Ziche M, 845
Zile MR, 281
Zlock DW, 580
Zou Y, 139
Zweier JL, 76

Subject Index

Volume 80, January-June 1997

A

Acetyl coenzyme A carboxylase
Upregulation of 5′-AMP–Activated Protein Kinase Is Responsible for the Increase in Myocardial Fatty Acid Oxidation Rates Following Birth in the Newborn Rabbit, 482

Acidosis
Electrophysiologic Effects of Acute Myocardial Ischemia: A Mechanistic Investigation of Action Potential Conduction and Conduction Failure, 124

Actin
Fibroblast Growth Factor-2 Potentiates Vascular Smooth Muscle Cell Migration to Platelet-Derived Growth Factor: Upregulation of $\alpha_2\beta_1$ Integrin and Disassembly of Actin Filaments, 627

Actin, α-smooth muscle
Embryonic Endothelial Cells Transdifferentiate Into Mesenechymal Cells Expressing Smooth Muscle Actins In Vivo and In Vitro, 444

Action potential
Evidence That Outwardly Rectifying Cl^- Channels Underlie Volume-Regulated Cl^- Currents in Heart, 103
Outward K^+ Current Densities and Kv1.5 Expression Are Reduced in Chronic Human Atrial Fibrillation, 772

Adaptation
Myocyte Adaptation to Chronic Hypoxia and Development of Tolerance to Subsequent Acute Severe Hypoxia, 699

Adeno-associated virus
Adeno-Associated Virus Vectors for Vascular Gene Delivery, 497

Adenosine
Modulation of Renal Cortical Blood Flow During Static Exercise in Humans, 62
Short-term Exercise Training Enhances Reflex Cholinergic Nitric Oxide–Dependent Coronary Vasodilation in Conscious Dogs, 868

Adenosine receptor
Selective Activation of A_3 Adenosine Receptors With N^6-(3-Iodobenzyl)Adenosine-5′-*N*-Methyluronamide Protects Against Myocardial Stunning and Infarction Without Hemodynamic Changes in Conscious Rabbits, 800

Adenovirus vector
Expression and Function of Recombinant Endothelial Nitric Oxide Synthase Gene in Canine Basilar Artery, 327

Adenylyl cyclase
Adenylyl Cyclases as Integrators of Transmembrane Signal Transduction, 297
Enhancement of the ATP-Sensitive K^+ Current by Extracellular ATP in Rat Ventricular Myocytes: Involvement of Adenylyl Cyclase–Induced Subsarcolemmal ATP Depletion, 589

Adhesion molecule-1
Inhibition of Stimulus-Induced Endothelial Cell Intercellular Adhesion Molecule-1, E-Selectin, and Vascular Cellular Adhesion Molecule-1 Expression by Arachidonic Acid and Its Hydroxy and Hydroperoxy Derivatives, 149

Adrenergic vasoconstriction
Endogenous Nitric Oxide Masks α_2-Adrenergic Coronary Vasoconstriction During Exercise in the Ischemic Heart, 196

Adventitia
Expression of Nonmuscle Myosin Heavy Chain-B Isoform in the Vessel Wall of Porcine Coronary Arteries After Balloon Angioplasty, 514

Aminoguanidine
Expression of Inducible Nitric Oxide Synthase in Rat Experimental Autoimmune Myocarditis With Special Reference to Changes in Cardiac Hemodynamics, 11

5′-AMP–activated protein kinase
Upregulation of 5′-AMP–Activated Protein Kinase Is Responsible for the Increase in Myocardial Fatty Acid Oxidation Rates Following Birth in the Newborn Rabbit, 482

Angiogenesis
Monocyte Chemotactic Protein-1 Increases Collateral and Peripheral Conductance After Femoral Artery Occlusion, 829

Angioplasty
Expression of Nonmuscle Myosin Heavy Chain-B Isoform in the Vessel Wall of Porcine Coronary Arteries After Balloon Angioplasty, 514
Reinjury of Arterial Lesions Induces Intimal Smooth Muscle Cell Replication That Is Not Controlled by Fibroblast Growth Factor 2, 408
Temporally and Spatially Coordinated Expression of Cell Cycle Regulatory Factors After Angioplasty, 418

Angiotensin
Combined Inhibition of Endothelin and Angiotensin II Receptors Blocks Volume Load-Induced Cardiac Hormone Release, 114

Angiotensin-converting enzyme
Functional and Biochemical Analysis of Angiotensin II-Forming Pathways in the Human Heart, 219
Suppression of Angiotensin-Converting Enzyme Expression and Activity by Shear Stress, 312

Angiotensin I-converting enzyme inhibitor
In Vitro Modulation of a Resistance Artery Diameter by the Tissue Renin-Angiotensin System of a Large Donor Artery, 189

Angiotensin II
Angiotensin II and Serum Differentially Regulate Expression of Cyclins, Activity of Cyclin-Dependent Kinases, and Phosphorylation of Retinoblastoma Gene Product in Neonatal Cardiac Myocytes, 228
Angiotensin II Stimulates c-Jun NH_2-Terminal Kinase in Cultured Cardiac Myocytes of Neonatal Rats, 139
In Vitro Modulation of a Resistance Artery Diameter by the Tissue Renin-Angiotensin System of a Large Donor Artery, 189
p22phox mRNA Expression and NADPH Oxidase Activity Are Increased in Aortas From Hypertensive Rats, 45
Vascular Thrombin Receptor Regulation in Hypertensive Rats, 838

Anisotropy
Dissociated Spatial Patterning of Gap Junctions and Cell Adhesion Junctions During Postnatal Differentiation of Ventricular Myocardium, 88

Anoxia
Electrophysiologic Effects of Acute Myocardial Ischemia: A Mechanistic Investigation of Action Potential Conduction and Conduction Failure, 124

Antiarryhthmic drug
Antisense Oligodeoxynucleotides Directed Against Kv1.5 mRNA Specifically Inhibit Ultrarapid Delayed Rectifier K^+ Currrent in Cultured Adult Human Atrial Myocytes, 572
Termination of Reentry by Lidocaine in the Tricuspid Ring In Vitro: Role of Cycle-Length Oscillation, Fast Use-Dependent Kinetics, and Fixed Block, 242

Antioxidant
Hypoxia/Reoxygenation Stimulates Jun Kinase Activity Through Redox Signaling in Cardiac Myocytes, 336

Antisense inhibition
Ras Inhibits Jun-Activated Human Atrial Natriuretic Peptide Gene Transcription in Cultured Ventricular Myocytes, 580

Antisense oligomer
The Effect of Oligonucleotides to c-*myb* on Vascular Smooth Muscle Cell Proliferation and Neointima Formation After Porcine Coronary Angioplasty, 520

Aorta
An Origin for Smooth Muscle Cells From Endothelium? 601
Vascular Thrombin Receptor Regulation in Hypertensive Rats, 838
Arterial injury
Plasminogen Activator Inhibitor Type 1 and Tissue Inhibitor of Metalloproteinases-2 Increase After Arterial Injury in Rats, 490
Arterioles
Mechanisms of Coronary Microvascular Dilation Induced by the Activation of Pertussis Toxin-Sensitive G Proteins Are Vessel-Size Dependent: Heterogeneous Involvement of Nitric Oxide Pathway and ATP-Sensitive K^+ Channels, 1
Artery
Collagen VIII Is Expressed by Vascular Smooth Muscle Cells in Response to Vascular Injury, 532
Lipoprotein Lipase Increases Lipoprotein Binding to the Artery Wall and Increases Endothelial Layer Permeability by Formation of Lipolysis Products, 819
Atherosclerosis
Exogenous Oxidized Low-Density Lipoprotein Injures and Alters the Barrier Function of Endothelium in Rats In Vivo, 37
Induction of P-Selectin by Oxidized Lipoproteins: Separate Effects on Synthesis and Surface Expression, 810
Integrin Very Late Antigen-4 Is Expressed in Human Smooth Muscle Cell: Involvement of α_4 and Vascular Cell Adhesion Molecule-1 During Smooth Muscle Cell Differentiation, 159
Lipoprotein Lipase Increases Lipoprotein Binding to the Artery Wall and Increases Endothelial Layer Permeability by Formation of Lipolysis Products, 819
Mechanical Strain Tightly Controls Fibroblast Growth Factor-2 Release From Cultured Human Vascular Smooth Muscle Cells, 28
Residence Time of Low-Density Lipoprotein in the Normal and Atherosclerotic Rabbit Aorta, 208
ATP
Enhancement of the ATP-Sensitive K^+ Current by Extracellular ATP in Rat Ventricular Myocytes: Involvement of Adenylyl Cyclase–Induced Subsarcolemmal ATP Depletion, 589
Hydroxyl Radical Inhibits Sarcoplasmic Reticulum Ca^{2+}-ATPase Function by Direct Attack on the ATP Binding Site, 76
ATP hydrolysis
Intracellular Ca^{2+} Increases the Mitochondrial NADH Concentration During Elevated Work in Intact Cardiac Muscle, 82
ATP-sensitive K^+ channel
Enhancement of the ATP-Sensitive K^+ Current by Extracellular ATP in Rat Ventricular Myocytes: Involvement of Adenylyl Cyclase–Induced Subsarcolemmal ATP Depletion, 589
Atrial fibrillation
Outward K^+ Current Densities and Kv1.5 Expression Are Reduced in Chronic Human Atrial Fibrillation, 772
Atrial natriuretic peptide
Combined Inhibition of Endothelin and Angiotensin II Receptors Blocks Volume Load-Induced Cardiac Hormone Release, 114
Ras Inhibits Jun-Activated Human Atrial Natriuretic Peptide Gene Transcription in Cultured Ventricular Myocytes, 580
Atrioventricular block
Arrhythmogenicity of IgG and Anti-52-kD SSA/Ro Affinity-Purified Antibodies From Mothers of Children With Congenital Heart Block, 354
Atrium
Characterization of Gap Junction Channels in Adult Rabbit Atrial and Ventricular Myocardium, 673
Autocrine proliferation
Nitric Oxide Promotes Proliferation and Plasminogen Activator Production by Coronary Venular Endothelium Through Endogenous bFGF, 845

B

β_3 integrin
Integrin Signaling Transduces Shear Stress-Dependent Vasodilation of Coronary Arterioles, 320
Baroreceptor
Non–Voltage-Gated Ca^{2+} Influx Through Mechanosensitive Ion Channels in Aortic Baroreceptor Neurons, 861
Bezold-Jarisch reflex
Short-term Exercise Training Enhances Reflex Cholinergic Nitric Oxide–Dependent Coronary Vasodilation in Conscious Dogs, 868
Biological transport
Exogenous Oxidized Low-Density Lipoprotein Injures and Alters the Barrier Function of Endothelium in Rats In Vivo, 37
Biomechanics
Mechanical Strain Tightly Controls Fibroblast Growth Factor-2 Release From Cultured Human Vascular Smooth Muscle Cells, 28
Blood flow visualization
Unilateral Vitelline Vein Ligation Alters Intracardiac Blood Flow Patterns and Morphogenesis in the Chick Embryo, 473
Bovine pulmonary endothelial cell
Suppression of Angiotensin-Converting Enzyme Expression and Activity by Shear Stress, 312

C

c-Jun NH_2-terminal kinase
Angiotensin II Stimulates c-Jun NH_2-Terminal Kinase in Cultured Cardiac Myocytes of Neonatal Rats, 139
C-*myb*
The Effect of Oligonucleotides to c-*myb* on Vascular Smooth Muscle Cell Proliferation and Neointima Formation After Porcine Coronary Angioplasty, 520
Ca^{2+}
Angiotensin II Stimulates c-Jun NH_2-Terminal Kinase in Cultured Cardiac Myocytes of Neonatal Rats, 139
c-*Myb*–Dependent Cell Cycle Progression and Ca^{2+} Storage in Cultured Vascular Smooth Muscle Cells, 617
Non–Voltage-Gated Ca^{2+} Influx Through Mechanosensitive Ion Channels in Aortic Baroreceptor Neurons, 861
Ca^{2+}-ATPase
Hydroxyl Radical Inhibits Sarcoplasmic Reticulum Ca^{2+}-ATPase Function by Direct Attack on the ATP Binding Site, 76
Targeted Ablation of the Phospholamban Gene Is Associated With a Marked Decrease in Sensitivity in Aortic Smooth Muscle, 506
Ca^{2+} current
C2 Region–Derived Peptides of β-Protein Kinase C Regulate Cardiac Ca^{2+} Channels, 720
Ca^{2+} sensitizer
Differential Effects of the Ca^{2+} Sensitizers Caffeine and CGP 48506 on the Relaxation Rate of Rat Skinned Cardiac Trabeculae, 682
Caffeine
Differential Effects of the Ca^{2+} Sensitizers Caffeine and CGP 48506 on the Relaxation Rate of Rat Skinned Cardiac Trabeculae, 682
cAMP
Characterization and Regulation of Prostaglandin E_2 Receptor and Receptor-Coupled Functions in the Choroidal Vasculature of the Pig During Development, 463
Capillary permeability
Increased Hepatocyte Permeability Surface Area Product for ^{86}Rb With Increase in Blood Flow, 645
Captopril
In Vitro Modulation of a Resistance Artery Diameter by the Tissue Renin-Angiotensin System of a Large Donor Artery, 189
Carbon monoxide
Nitric Oxide Induces Heme Oxygenase-1 Gene Expression and Carbon Monoxide Production in Vascular Smooth Muscle Cells, 557
Cardiac action potential
Antisense Oligodeoxynucleotides Directed Against Kv1.5 mRNA Specifically Inhibit Ultrarapid Delayed Rectifier K^+ Current in Cultured Adult Human Atrial Myocytes, 572

Cardiac contraction
Inhibition of Myocardial Crossbridge Cycling by Hypoxic Endothelial Cells: A Potential Mechanism for Matching Oxygen Supply and Demand? 688
Cardiac development
Things Are Developing in Cardiology, 604
Cardiac electrophysiology
Evidence That Outwardly Rectifying Cl^- Channels Underlie Volume-Regulated Cl^- Currents in Heart, 103
Cardiac hypertrophy
Ras Inhibits Jun-Activated Human Atrial Natriuretic Peptide Gene Transcription in Cultured Ventricular Myocytes, 580
Cardiac injury
Na^+-H^+ Exchange Inhibition Protects Against Mechanical, Ultrastructural, and Biochemical Impairment Induced by Low Concentrations of Lysophosphatidylcholine in Isolated Rat Hearts, 95
Cardiac malformation
Unilateral Vitelline Vein Ligation Alters Intracardiac Blood Flow Patterns and Morphogenesis in the Chick Embryo, 473
Cardiac muscle
Embryonic Expression of the Gax Homeodomain Protein in Cardiac, Smooth, and Skeletal Muscle, 452
Tissue and Species Distribution of mRNA for the I_{kr}-like K^+ Channel, ERG, 261
Cardiac myocyte
Angiotensin II and Serum Differentially Regulate Expression of Cyclins, Activity of Cyclin-Dependent Kinases, and Phosphorylation of Retinoblastoma Gene Product in Neonatal Cardiac Myocytes, 228
Angiotensin II Stimulates c-Jun NH_2-Terminal Kinase in Cultured Cardiac Myocytes of Neonatal Rats, 139
C2 Region–Derived Peptides of β-Protein Kinase C Regulate Cardiac Ca^{2+} Channels, 720
Cytoskeletal Mechanics in Pressure-Overload Cardiac Hypertrophy, 281
Involvement of Phosphorylation in Doxorubicin-Mediated Myofibril Degeneration: An Immunofluorescence Microscopy Analysis, 52
Microtubules and Pressure-Overload Hypertrophy, 295
Myocyte Adaptation to Chronic Hypoxia and Development of Tolerance to Subsequent Acute Severe Hypoxia, 699
Na^+-H^+ Exchange Inhibition Protects Against Mechanical, Ultrastructural, and Biochemical Impairment Induced by Low Concentrations of Lysophosphatidylcholine in Isolated Rat Hearts, 95
Simulated Ischemia Increases the Susceptibility of Rat Cardiomyocytes to Hypercontracture, 69
Cardiomyocyte plasma membrane
Cellular and Subcellular Expression of the Monocarboxylate Transporter MCT1 in Rat Heart: A High-Resolution Immunogold Analysis, 400
Cardiomyopathy
Expression of Inducible Nitric Oxide Synthase in Rat Experimental Autoimmune Myocarditis With Special Reference to Changes in Cardiac Hemodynamics, 11
Organization and Sequence of Human Cardiac Myosin Binding Protein C Gene (*MYBPC3*) and Identification of Mutations Predicted to Produce Truncated Proteins in Familial Hypertrophic Cardiomyopathy, 427
Cardiovascular disease
Collagen VIII Is Expressed by Vascular Smooth Muscle Cells in Response to Vascular Injury, 532
Cell-cell interaction
Integrin Very Late Antigen-4 Is Expressed in Human Smooth Muscle Cell: Involvement of α_4 and Vascular Cell Adhesion Molecule-1 During Smooth Muscle Cell Differentiation, 159
Cell cycle
Angiotensin II and Serum Differentially Regulate Expression of Cyclins, Activity of Cyclin-Dependent Kinases, and Phosphorylation of Retinoblastoma Gene Product in Neonatal Cardiac Myocytes, 228
c-Myb–Dependent Cell Cycle Progression and Ca^{2+} Storage in Cultured Vascular Smooth Muscle Cells, 617
Cell cycle control
Temporally and Spatially Coordinated Expression of Cell Cycle Regulatory Factors After Angioplasty, 418
Cell movement
Collagen VIII Is Expressed by Vascular Smooth Muscle Cells in Response to Vascular Injury, 532
Cell swelling
Evidence That Outwardly Rectifying Cl^- Channels Underlie Volume-Regulated Cl^- Currents in Heart, 103
Cerebral artery
Expression and Function of Recombinant Endothelial Nitric Oxide Synthase Gene in Canine Basilar Artery, 327
CGP 48506
Differential Effects of the Ca^{2+} Sensitizers Caffeine and CGP 48506 on the Relaxation Rate of Rat Skinned Cardiac Trabeculae, 682
Chromosome 22
Genetic Disorders of Cardiac Morphogenesis: The DiGeorge and Velocardiofacial Syndromes, 437
Chymase
Functional and Biochemical Analysis of Angiotensin II-Forming Pathways in the Human Heart, 219
Cilazapril
In Vitro Modulation of a Resistance Artery Diameter by the Tissue Renin-Angiotensin System of a Large Donor Artery, 189
Cl^- channel
Electrophysiological Consequences of Purinergic Receptor Stimulation in Isolated Rat Pulmonary Arterial Myocytes, 170
Evidence That Outwardly Rectifying Cl^- Channels Underlie Volume-Regulated Cl^- Currents in Heart, 103
Collagen
Fibroblast Growth Factor-2 Potentiates Vascular Smooth Muscle Cell Migration to Platelet-Derived Growth Factor: Upregulation of $\alpha_2\beta_1$ Integrin and Disassembly of Actin Filaments, 627
Collateral artery growth
Monocyte Chemotactic Protein-1 Increases Collateral and Peripheral Conductance After Femoral Artery Occlusion, 829
Conduction failure
Electrophysiologic Effects of Acute Myocardial Ischemia: A Mechanistic Investigation of Action Potential Conduction and Conduction Failure, 124
Confocal microscopy
Dystrophin Is Not a Specific Component of the Cardiac Costamere, 269
Connexin43
Conductances and Selective Permeability of Connexin43 Gap Junction Channels Examined in Neonatal Rat Heart Cells, 708
Conotruncal defects
Genetic Disorders of Cardiac Morphogenesis: The DiGeorge and Velocardiofacial Syndromes, 437
Contractile protein
Organization and Sequence of Human Cardiac Myosin Binding Protein C Gene (*MYBPC3*) and Identification of Mutations Predicted to Produce Truncated Proteins in Familial Hypertrophic Cardiomyopathy, 427
Coronary artery
The Effects of Hypoxia on pH_i in Porcine Coronary Artery Endothelium and Smooth Muscle: A Novel Method for Measurements in Endothelial Cells In Situ, 21
Coronary circulation
Mechanisms of Coronary Microvascular Dilation Induced by the Activation of Pertussis Toxin-Sensitive G Proteins Are Vessel-Size Dependent: Heterogeneous Involvement of Nitric Oxide Pathway and ATP-Sensitive K^+ Channels, 1
Coronary vasodilation
Endogenous Nitric Oxide Masks α_2-Adrenergic Coronary Vasoconstriction During Exercise in the Ischemic Heart, 196
Costamere
Dystrophin Is Not a Specific Component of the Cardiac Costamere, 269
Crossbridge
Differential Effects of the Ca^{2+} Sensitizers Caffeine and CGP 48506 on the Relaxation Rate of Rat Skinned Cardiac Trabeculae, 682

Cynomolgus monkey
Adeno-Associated Virus Vectors for Vascular Gene Delivery, 497
Cytoskeleton
Cytoskeletal Mechanics in Pressure-Overload Cardiac Hypertrophy, 281
Mierotubules and Pressure-Overload Hypertrophy, 295
Cytotoxicity
Exogenous Oxidized Low-Density Lipoprotein Injures and Alters the Barrier Function of Endothelium in Rats In Vivo, 37

D

Dahl rat
Vascular Thrombin Receptor Regulation in Hypertensive Rats, 838
Dehydrogenase
Intracellular Ca^{2+} Increases the Mitochondrial NADH Concentration During Elevated Work in Intact Cardiac Muscle, 82
Delayed rectifier K^+ current
Rapid Inactivation Determines the Rectification and $[K^+]_o$ Dependence of the Rapid Component of the Delayed Rectifier K^+ Current in Cardiac Cells, 782
Tissue and Species Distribution of mRNA for the I_{kr}-like K^+ Channel, ERG, 261
Desensitization
Differential Desensitization of Thromboxane A_2 Receptor Subtypes, 551
Development
Dissociated Spatial Patterning of Gap Junctions and Cell Adhesion Junctions During Postnatal Differentiation of Ventricular Myocardium, 88
Endothelin-1 Alters the Contractile Phenotype of Cultured Embryonic Smooth Muscle Cells, 885
Diabetes
Modulation by pH_o and Intracellular Ca^{2+} of Na^+-H^+ Exchange in Diabetic Rat Isolated Ventricular Myocytes, 253
DiGeorge syndrome
Genetic Disorders of Cardiac Morphogenesis: The DiGeorge and Velocardiofacial Syndromes, 437
Downregulation
Differential Desensitization of Thromboxane A_2 Receptor Subtypes, 551
Doxorubicin
Involvement of Phosphorylation in Doxorubicin-Mediated Myofibril Degeneration: An Immunofluorescence Microscopy Analysis, 52
Dystrophin
Dystrophin Is Not a Specific Component of the Cardiac Costamere, 269

E

E-selectin
E-Selectin Gene Expression in Vascular Smooth Muscle Cells: Evidence for a Tissue-Specific Repressor Protein, 305
Editorials
Manipulating Myosin Light Chain 2 Isoforms In Vivo: A Transgenic Approach to Understanding Contractile Protein Diversity, 751
Microtubules and Pressure-Overload Hypertrophy, 295
Missing Pieces: Myosin Binding Protein C Truncations in Familial Hypertrophic Cardiomyopathy, 435
Origin for Smooth Muscle Cells From Endothelium?, 601
Protean Patterns of Gene Expression in the Heart Conduction System, 749
Things Are Developing in Cardiology, 604
Eicosanoid
Differential Desensitization of Thromboxane A_2 Receptor Subtypes, 551
Epoxyeicosatrienoic Acids Activate K^+ Channels in Coronary Smooth Muscle Through a Guanine Nucleotide Binding Protein, 877
Elasticity
The Giant Protein Titin: Emerging Roles in Physiology and Pathophysiology, 290
Electrophysiology
Characterization of Gap Junction Channels in Adult Rabbit Atrial and Ventricular Myocardium, 673
Embryo
An Origin for Smooth Muscle Cells From Endothelium? 601
Embryonic Endothelial Cells Transdifferentiate Into Mesenchymal Cells Expressing Smooth Muscle Actins In Vivo and In Vitro, 444
Endothelial cell
Adeno-Associated Virus Vectors for Vascular Gene Delivery, 497
Embryonic Endothelial Cells Transdifferentiate Into Mesenchymal Cells Expressing Smooth Muscle Actins In Vivo and In Vitro, 444
Induction of P-Selectin by Oxidized Lipoproteins: Separate Effects on Synthesis and Surface Expression, 810
Inhibition of Myocardial Crossbridge Cycling by Hypoxic Endothelial Cells: A Potential Mechanism for Matching Oxygen Supply and Demand? 688
Inhibition of Stimulus-Induced Endothelial Cell Intercellular Adhesion Molecule-1, E-Selectin, and Vascular Cellular Adhesion Molecule-1 Expression by Arachidonic Acid and Its Hydroxy and Hydroperoxy Derivatives, 149
Oxidative Stress-Induced Actin Reorganization Mediated by the p38 Mitogen-Activated Protein Kinase/Heat Shock Protein 27 Pathway in Vascular Endothelial Cells, 383
Endothelin
Combined Inhibition of Endothelin and Angiotensin II Receptors Blocks Volume Load-Induced Cardiac Hormone Release, 114
Endothelin-1
Endothelin-1 Alters the Contractile Phenotype of Cultured Embryonic Smooth Muscle Cells, 885
Endothelium
Effects of Hypoxia on pH_i in Porcine Coronary Artery Endothelium and Smooth Muscle: A Novel Method for Measurements in Endothelial Cells In Situ, 21
Endogenous Nitric Oxide Masks α_2-Adrenergic Coronary Vasoconstriction During Exercise in the Ischemic Heart, 196
Integrin Signaling Transduces Shear Stress-Dependent Vasodilation of Coronary Arterioles, 320
Endothelium-derived hyperpolarizing factor
Epoxyeicosatrienoic Acids Activate K^+ Channels in Coronary Smooth Muscle Through a Guanine Nucleotide Binding Protein, 877
Exercise
Modulation of Renal Cortical Blood Flow During Static Exercise in Humans, 62
Short-term Exercise Training Enhances Reflex Cholinergic Nitric Oxide–Dependent Coronary Vasodilation in Conscious Dogs, 868
Extracellular K^+
Rapid Inactivation Determines the Rectification and $[K^+]_o$ Dependence of the Rapid Component of the Delayed Rectifier K^+ Current in Cardiac Cells, 782
Extracellular matrix
Collagen VIII Is Expressed by Vascular Smooth Muscle Cells in Response to Vascular Injury, 532

F

F-actin
Oxidative Stress-Induced Actin Reorganization Mediated by the p38 Mitogen-Activated Protein Kinase/Heat Shock Protein 27 Pathway in Vascular Endothelial Cells, 383
Fast inactivation
Rapid Inactivation Determines the Rectification and $[K^+]_o$ Dependence of the Rapid Component of the Delayed Rectifier K^+ Current in Cardiac Cells, 782
Fatty acid oxidation
Upregulation of 5′-AMP–Activated Protein Kinase Is Responsible for the Increase in Myocardial Fatty Acid Oxidation Rates Following Birth in the Newborn Rabbit, 482
Fibroblast growth factor 2
Fibroblast Growth Factor-2 Potentiates Vascular Smooth Muscle Cell Migration to Platelet-Derived Growth Factor: Upregulation of $\alpha_2\beta_1$ Integrin and Disassembly of Actin Filaments, 627
Mechanical Strain Tightly Controls Fibroblast Growth Factor-2 Release From Cultured Human Vascular Smooth Muscle Cells, 28
Reinjury of Arterial Lesions Induces Intimal Smooth Muscle Cell Replication That Is Not Controlled by Fibroblast Growth Factor 2, 408

Vascular Smooth Muscle Cell Cytotoxicity and Sustained Inhibition of Neointimal Formation by Fibroblast Growth Factor 2–Saporin Fusion Protein, 542

Focal adhesion kinase
Angiotensin II Signal Transduction in Vascular Smooth Muscle: Role of Tyrosine Kinases, 607

Force
Intracellular Ca^{2+} Increases the Mitochondrial NADH Concentration During Elevated Work in Intact Cardiac Muscle, 82

Free radical
Oxygen Radicals Can Induce Preconditioning in Rabbit Hearts, 743

Freeze-fracture cytochemistry
Dystrophin Is Not a Specific Component of the Cardiac Costamere, 269

G

G protein
Enhancement of the ATP-Sensitive K^+ Current by Extracellular ATP in Rat Ventricular Myocytes: Involvement of Adenylyl Cyclase–Induced Subsarcolemmal ATP Depletion, 589
Epoxyeicosatrienoic Acids Activate K^+ Channels in Coronary Smooth Muscle Through a Guanine Nucleotide Binding Protein, 877

Gap junction
Characterization of Gap Junction Channels in Adult Rabbit Atrial and Ventricular Myocardium, 673
Conductances and Selective Permeability of Connexin43 Gap Junction Channels Examined in Neonatal Rat Heart Cells, 708
Dissociated Spatial Patterning of Gap Junctions and Cell Adhesion Junctions During Postnatal Differentiation of Ventricular Myocardium, 88

Gax
Embryonic Expression of the Gax Homeodomain Protein in Cardiac, Smooth, and Skeletal Muscle, 452

Gd^{3+}
Non–Voltage-Gated Ca^{2+} Influx Through Mechanosensitive Ion Channels in Aortic Baroreceptor Neurons, 861

Gene
Transgenic Remodeling of the Regulatory Myosin Light Chains in the Mammalian Heart, 655

Gene disruption
Compartment-Selective Sensitivity of Cardiovascular Morphogenesis to Combinations of Retinoic Acid Receptor Gene Mutations, 757

Gene expression
Collagen VIII Is Expressed by Vascular Smooth Muscle Cells in Response to Vascular Injury, 532
E-Selectin Gene Expression in Vascular Smooth Muscle Cells: Evidence for a Tissue-Specific Repressor Protein, 305

Gene regulation
Protean Patterns of Gene Expression in the Heart Conduction System, 749

Gene therapy
Expression and Function of Recombinant Endothelial Nitric Oxide Synthase Gene in Canine Basilar Artery, 327

Gene transcription
Ras Inhibits Jun-Activated Human Atrial Natriuretic Peptide Gene Transcription in Cultured Ventricular Myocytes, 580

Gene transfer
Adeno-Associated Virus Vectors for Vascular Gene Delivery, 497

Genetic deficiency
Compartment-Selective Sensitivity of Cardiovascular Morphogenesis to Combinations of Retinoic Acid Receptor Gene Mutations, 757

Genetics
Missing Pieces: Myosin Binding Protein C Truncations in Familial Hypertrophic Cardiomyopathy, 435
Organization and Sequence of Human Cardiac Myosin Binding Protein C Gene (*MYBPC3*) and Identification of Mutations Predicted to Produce Truncated Proteins in Familial Hypertrophic Cardiomyopathy, 427

Glutathione
Hypoxia/Reoxygenation Stimulates Jun Kinase Activity Through Redox Signaling in Cardiac Myocytes, 336

Glycogen
Myocyte Adaptation to Chronic Hypoxia and Development of Tolerance to Subsequent Acute Severe Hypoxia, 699

GRGDNP
Integrin Signaling Transduces Shear Stress-Dependent Vasodilation of Coronary Arterioles, 320

Guanine nucleotide regulatory protein
Mechanisms of Coronary Microvascular Dilation Induced by the Activation of Pertussis Toxin-Sensitive G Proteins Are Vessel-Size Dependent: Heterogeneous Involvement of Nitric Oxide Pathway and ATP-Sensitive K^+ Channels, 1

H

Heart
Adenylyl Cyclases as Integrators of Transmembrane Signal Transduction, 297
Dissociated Spatial Patterning of Gap Junctions and Cell Adhesion Junctions During Postnatal Differentiation of Ventricular Myocardium, 88
Evidence That Outwardly Rectifying Cl^- Channels Underlie Volume-Regulated Cl^- Currents in Heart, 103
Functional Effects of Protein Kinase C Activation on the Human Cardiac Na^+ Channel, 370
Intracellular Ca^{2+} Increases the Mitochondrial NADH Concentration During Elevated Work in Intact Cardiac Muscle, 82
Rapid Inactivation Determines the Rectification and $[K^+]_o$ Dependence of the Rapid Component of the Delayed Rectifier K^+ Current in Cardiac Cells, 782

Heart conduction system
Skeletal Muscle–Specific Myosin Binding Protein-H Is Expressed in Purkinje Fibers of the Cardiac Conduction System, 665

Heart conduction tissue
Protean Patterns of Gene Expression in the Heart Conduction System, 749

Heart development
Unilateral Vitelline Vein Ligation Alters Intracardiac Blood Flow Patterns and Morphogenesis in the Chick Embryo, 473

Heart disease
Things Are Developing in Cardiology, 604

Heart electrophysiology
Antisense Oligodeoxynucleotides Directed Against Kv1.5 mRNA Specifically Inhibit Ultrarapid Delayed Rectifier K^+ Current in Cultured Adult Human Atrial Myocytes, 572

Heart failure
Functional and Biochemical Analysis of Angiotensin II-Forming Pathways in the Human Heart, 219

Heat shock protein 27
Oxidative Stress-Induced Actin Reorganization Mediated by the p38 Mitogen-Activated Protein Kinase/Heat Shock Protein 27 Pathway in Vascular Endothelial Cells, 383

Heme oxygenase
Nitric Oxide Induces Heme Oxygenase-1 Gene Expression and Carbon Monoxide Production in Vascular Smooth Muscle Cells, 557

Hemodynamic interference
Unilateral Vitelline Vein Ligation Alters Intracardiac Blood Flow Patterns and Morphogenesis in the Chick Embryo, 473

Hemodynamics
Expression of Inducible Nitric Oxide Synthase in Rat Experimental Autoimmune Myocarditis With Special Reference to Changes in Cardiac Hemodynamics, 11

Heparin-binding epidermal growth factor–like growth factor
Lysophosphatidylcholine Increases Expression of Heparin-Binding Epidermal Growth Factor–Like Growth Factor in Human T Lymphocytes, 638

Hepatic blood flow
Increased Hepatocyte Permeability Surface Area Product for ^{86}Rb With Increase in Blood Flow, 645

Hepatic sinusoidal recruitment
Increased Hepatocyte Permeability Surface Area Product for ^{86}Rb With Increase in Blood Flow, 645

Hibernation
Inhibition of Myocardial Crossbridge Cycling by Hypoxic Endothelial Cells: A Potential Mechanism for Matching Oxygen Supply and Demand? 688
Homeobox gene
Embryonic Expression of the Gax Homeodomain Protein in Cardiac, Smooth, and Skeletal Muscle, 452
Human aortic development
Integrin Very Late Antigen-4 Is Expressed in Human Smooth Muscle Cell: Involvement of α_4 and Vascular Cell Adhesion Molecule-1 During Smooth Muscle Cell Differentiation, 159
Human cardiac muscle
Effects of *Tityus serrulatus* Scorpion Toxin γ on Voltage-Gated Na^+ Channels, 363
Human cardiac myocyte
Different Compartments of Sarcoplasmic Reticulum Participate in the Excitation-Contraction Coupling Process in Human Atrial Myocytes, 345
Human fetal heart
Arrhythmogenicity of IgG and Anti-52-kD SSA/Ro Affinity-Purified Antibodies From Mothers of Children With Congenital Heart Block, 354
Hydroperoxyeicosatetraenoic acid
Inhibition of Stimulus-Induced Endothelial Cell Intercellular Adhesion Molecule-1, E-Selectin, and Vascular Cellular Adhesion Molecule-1 Expression by Arachidonic Acid and Its Hydroxy and Hydroperoxy Derivatives, 149
Hydroxyl radical
Hydroxyl Radical Inhibits Sarcoplasmic Reticulum Ca^{2+}-ATPase Function by Direct Attack on the ATP Binding Site, 76
Hypercontracture
Simulated Ischemia Increases the Susceptibility of Rat Cardiomyocytes to Hypercontracture, 69
Hyperkalemia
Electrophysiologic Effects of Acute Myocardial Ischemia: A Mechanistic Investigation of Action Potential Conduction and Conduction Failure, 124
Hypertension
Activity and Expression of Na^+-H^+ Exchanger Isoforms 1 and 3 in Kidney Proximal Tubules of Hypertensive Rats, 853
p22phox mRNA Expression and NADPH Oxidase Activity Are Increased in Aortas From Hypertensive Rats, 45
Vascular Thrombin Receptor Regulation in Hypertensive Rats, 838
Hypertrophic myopathy
Missing Pieces: Myosin Binding Protein C Truncations in Familial Hypertrophic Cardiomyopathy, 435
Hypertrophy
Angiotensin II and Serum Differentially Regulate Expression of Cyclins, Activity of Cyclin-Dependent Kinases, and Phosphorylation of Retinoblastoma Gene Product in Neonatal Cardiac Myocytes, 228
Changes in Cell-to-Cell Electrical Coupling Associated With Left Ventricular Hypertrophy, 765
Cytoskeletal Mechanics in Pressure-Overload Cardiac Hypertrophy, 281
Microtubules and Pressure-Overload Hypertrophy, 295
Organization and Sequence of Human Cardiac Myosin Binding Protein C Gene (*MYBPC3*) and Identification of Mutations Predicted to Produce Truncated Proteins in Familial Hypertrophic Cardiomyopathy, 427
Hypoxia
Inhibition of Myocardial Crossbridge Cycling by Hypoxic Endothelial Cells: A Potential Mechanism for Matching Oxygen Supply and Demand? 688
Myocyte Adaptation to Chronic Hypoxia and Development of Tolerance to Subsequent Acute Severe Hypoxia, 699
The Effects of Hypoxia on pH_i in Porcine Coronary Artery Endothelium and Smooth Muscle: A Novel Method for Measurements in Endothelial Cells In Situ, 21

I

Idazoxan
Endogenous Nitric Oxide Masks α_2-Adrenergic Coronary Vasoconstriction During Exercise in the Ischemic Heart, 196
Immunization
Arrhythmogenicity of IgG and Anti-52-kD SSA/Ro Affinity-Purified Antibodies From Mothers of Children With Congenital Heart Block, 354
Immunocytochemistry
Characterization of Gap Junction Channels in Adult Rabbit Atrial and Ventricular Myocardium, 673
Immunogold analysis
Cellular and Subcellular Expression of the Monocarboxylate Transporter MCT1 in Rat Heart: A High-Resolution Immunogold Analysis, 400
Inositol 1,4,5-trisphosphate
Characterization and Regulation of Prostaglandin E_2 Receptor and Receptor-Coupled Functions in the Choroidal Vasculature of the Pig During Development, 463
Integrin
Fibroblast Growth Factor-2 Potentiates Vascular Smooth Muscle Cell Migration to Platelet-Derived Growth Factor: Upregulation of $\alpha_2\beta_1$ Integrin and Disassembly of Actin Filaments, 627
Integrin Signaling Transduces Shear Stress-Dependent Vasodilation of Coronary Arterioles, 320
Intercellular adhesion junction
Dissociated Spatial Patterning of Gap Junctions and Cell Adhesion Junctions During Postnatal Differentiation of Ventricular Myocardium, 88
Intima
An Origin for Smooth Muscle Cells From Endothelium? 601
Intracellular Ca^{2+}
Ca^{2+} As a Mediator of Ischemic Preconditioning, 790
Modulation by pH_o and Intracellular Ca^{2+} of Na^+-H^+ Exchange in Diabetic Rat Isolated Ventricular Myocytes, 253
Role of Ca^{2+} in Metabolic Inhibition-Induced Norepinephrine Release in Rat Brain Synaptosomes, 179
Intracellular Ca^{2+} transient
Different Compartments of Sarcoplasmic Reticulum Participate in the Excitation-Contraction Coupling Process in Human Atrial Myocytes, 345
Intracellular resistance
Changes in Cell-to-Cell Electrical Coupling Associated With Left Ventricular Hypertrophy, 765
Ischemia
Ca^{2+} As a Mediator of Ischemic Preconditioning, 790
Early and Late Phases of Ischemic Preconditioning: A Comparative Analysis of Their Effects on Infarct Size, Myocardial Stunning, and Arrhythmias in Conscious Pigs Undergoing a 40-Minute Coronary Occlusion, 730
Simulated Ischemia Increases the Susceptibility of Rat Cardiomyocytes to Hypercontracture, 69
Ischemia/reperfusion
Hydroxyl Radical Inhibits Sarcoplasmic Reticulum Ca^{2+}-ATPase Function by Direct Attack on the ATP Binding Site, 76
Hypoxia/Reoxygenation Stimulates Jun Kinase Activity Through Redox Signaling in Cardiac Myocytes, 336
Selective Activation of A_3 Adenosine Receptors With N^6-(3-Iodobenzyl)Adenosine-5′-*N*-Methyluronamide Protects Against Myocardial Stunning and Infarction Without Hemodynamic Changes in Conscious Rabbits, 800
Ischemic cardiopathy
A Novel Tetrodotoxin-Sensitive Na^+ Current in Cultured Human Coronary Myocytes, 377
Isoform diversity
Manipulating Myosin Light Chain 2 Isoforms In Vivo: A Transgenic Approach to Understanding Contractile Protein Diversity, 751
Isolated rat heart
Na^+-H^+ Exchange Inhibition Protects Against Mechanical, Ultrastructural, and Biochemical Impairment Induced by Low Concentrations of Lysophosphatidylcholine in Isolated Rat Hearts, 95

K

K^+ channels
Antisense Oligodeoxynucleotides Directed Against Kv1.5 mRNA Specifically Inhibit Ultrarapid Delayed Rectifier K^+ Current in Cultured Adult Human Atrial Myocytes, 572

Epoxyeicosatrienoic Acids Activate K^+ Channels in Coronary Smooth Muscle Through a Guanine Nucleotide Binding Protein, 877
Outward K^+ Current Densities and Kv1.5 Expression Are Reduced in Chronic Human Atrial Fibrillation, 772
Tissue and Species Distribution of mRNA for the I_{kr}-like K^+ Channel, ERG, 261

K^+ current
Rapid Inactivation Determines the Rectification and $[K^+]_o$ Dependence of the Rapid Component of the Delayed Rectifier K^+ Current in Cardiac Cells, 782

Kv1.5
Outward K^+ Current Densities and Kv1.5 Expression Are Reduced in Chronic Human Atrial Fibrillation, 772

Kv2.1
Outward K^+ Current Densities and Kv1.5 Expression Are Reduced in Chronic Human Atrial Fibrillation, 772

L

L-type Ca^{2+} current
Arrhythmogenicity of IgG and Anti-52-kD SSA/Ro Affinity-Purified Antibodies From Mothers of Children With Congenital Heart Block, 354

Lactate transport
Cellular and Subcellular Expression of the Monocarboxylate Transporter MCT1 in Rat Heart: A High-Resolution Immunogold Analysis, 400

Lidocaine
Termination of Reentry by Lidocaine in the Tricuspid Ring In Vitro: Role of Cycle-Length Oscillation, Fast Use-Dependent Kinetics, and Fixed Block, 242

Lipoprotein, low-density, modified
Exogenous Oxidized Low-Density Lipoprotein Injures and Alters the Barrier Function of Endothelium in Rats In Vivo, 37

Local anesthetic
A Novel Tetrodotoxin-Sensitive Na^+ Current in Cultured Human Coronary Myocytes, 377

Local delivery
The Effect of Oligonucleotides to c-*myb* on Vascular Smooth Muscle Cell Proliferation and Neointima Formation After Porcine Coronary Angioplasty, 520

Longitudinal impedance
Changes in Cell-to-Cell Electrical Coupling Associated With Left Ventricular Hypertrophy, 765

Low-density lipoprotein
Lipoprotein Lipase Increases Lipoprotein Binding to the Artery Wall and Increases Endothelial Layer Permeability by Formation of Lipolysis Products, 819
Residence Time of Low-Density Lipoprotein in the Normal and Atherosclerotic Rabbit Aorta, 208

Lysophosphatidylcholine
Lysophosphatidylcholine Increases Expression of Heparin-Binding Epidermal Growth Factor–Like Growth Factor in Human T Lymphocytes, 638
Na^+-H^+ Exchange Inhibition Protects Against Mechanical, Ultrastructural, and Biochemical Impairment Induced by Low Concentrations of Lysophosphatidylcholine in Isolated Rat Hearts, 95

M

MCT1
Cellular and Subcellular Expression of the Monocarboxylate Transporter MCT1 in Rat Heart: A High-Resolution Immunogold Analysis, 400

Mechanosensitive channel
Non–Voltage-Gated Ca^{2+} Influx Through Mechanosensitive Ion Channels in Aortic Baroreceptor Neurons, 861

Metabolic inhibition
Role of Ca^{2+} in Metabolic Inhibition-Induced Norepinephrine Release in Rat Brain Synaptosomes, 179

Microcirculation
Mechanisms of Coronary Microvascular Dilation Induced by the Activation of Pertussis Toxin-Sensitive G Proteins Are Vessel-Size Dependent: Heterogeneous Involvement of Nitric Oxide Pathway and ATP-Sensitive K^+ Channels, 1

Microdeletion syndrome
Genetic Disorders of Cardiac Morphogenesis: The DiGeorge and Velocardiofacial Syndromes, 437

Microtubule
Cytoskeletal Mechanics in Pressure-Overload Cardiac Hypertrophy, 281

Microvascular endothelium
Nitric Oxide Promotes Proliferation and Plasminogen Activator Production by Coronary Venular Endothelium Through Endogenous bFGF, 845

Microvessel
Adeno-Associated Virus Vectors for Vascular Gene Delivery, 497

Mini review
Adenylyl Cyclases as Integrators of Transmembrane Signal Transduction, 297
Angiotensin II Signal Transduction in Vascular Smooth Muscle, 607
Giant Protein Titin, 290

Minimally modified low-density lipoprotein
Induction of P-Selectin by Oxidized Lipoproteins: Separate Effects on Synthesis and Surface Expression, 810

Mitogen-activated protein kinase
Hypoxia/Reoxygenation Stimulates Jun Kinase Activity Through Redox Signaling in Cardiac Myocytes, 336

Molecular genetics
Antisense Oligodeoxynucleotides Directed Against Kv1.5 mRNA Specifically Inhibit Ultrarapid Delayed Rectifier K^+ Current in Cultured Adult Human Atrial Myocytes, 572

Monocarboxylate transporter
Cellular and Subcellular Expression of the Monocarboxylate Transporter MCT1 in Rat Heart: A High-Resolution Immunogold Analysis, 400

Monocyte
Monocyte Chemotactic Protein-1 Increases Collateral and Peripheral Conductance After Femoral Artery Occlusion, 829

Monohydroxyeicosatetraenoic acid
Inhibition of Stimulus-Induced Endothelial Cell Intercellular Adhesion Molecule-1, E-Selectin, and Vascular Cellular Adhesion Molecule-1 Expression by Arachidonic Acid and Its Hydroxy and Hydroperoxy Derivatives, 149

mRNA expression
Tissue and Species Distribution of mRNA for the I_{kr}-like K^+ Channel, ERG, 261

Muscle
Transgenic Remodeling of the Regulatory Myosin Light Chains in the Mammalian Heart, 655

Muscle ultrastructure
The Giant Protein Titin: Emerging Roles in Physiology and Pathophysiology, 290

Muscle, smooth, vascular
p22phox mRNA Expression and NADPH Oxidase Activity Are Increased in Aortas From Hypertensive Rats, 45

Myocardial infarction
Oxygen Radicals Can Induce Preconditioning in Rabbit Hearts, 743
Selective Activation of A_3 Adenosine Receptors With N^6-(3-Iodobenzyl)Adenosine-5′-*N*-Methyluronamide Protects Against Myocardial Stunning and Infarction Without Hemodynamic Changes in Conscious Rabbits, 800

Myocardial ischemia
Electrophysiologic Effects of Acute Myocardial Ischemia: A Mechanistic Investigation of Action Potential Conduction and Conduction Failure, 124

Myocardial stunning
Role of Troponin I Proteolysis in the Pathogenesis of Stunned Myocardium, 393
Selective Activation of A_3 Adenosine Receptors With N^6-(3-Iodobenzyl)Adenosine-5′-*N*-Methyluronamide Protects Against Myocardial Stunning and Infarction Without Hemodynamic Changes in Conscious Rabbits, 800

Myocarditis
Expression of Inducible Nitric Oxide Synthase in Rat Experimental Autoimmune Myocarditis With Special Reference to Changes in Cardiac Hemodynamics, 11
Myocyte (See Cardiac myocyte)
Myofibril
Involvement of Phosphorylation in Doxorubicin-Mediated Myofibril Degeneration: An Immunofluorescence Microscopy Analysis, 52
Skeletal Muscle–Specific Myosin Binding Protein-H Is Expressed in Purkinje Fibers of the Cardiac Conduction System, 665
Myofibrillar protein
Protean Patterns of Gene Expression in the Heart Conduction System, 749
Myofilament
Inhibition of Myocardial Crossbridge Cycling by Hypoxic Endothelial Cells: A Potential Mechanism for Matching Oxygen Supply and Demand? 688
Role of Troponin I Proteolysis in the Pathogenesis of Stunned Myocardium, 393
Myosin
Missing Pieces: Myosin Binding Protein C Truncations in Familial Hypertrophic Cardiomyopathy, 435
Myosin binding protein
Organization and Sequence of Human Cardiac Myosin Binding Protein C Gene (*MYBPC3*) and Identification of Mutations Predicted to Produce Truncated Proteins in Familial Hypertrophic Cardiomyopathy, 427
Myosin binding protein-H
Skeletal Muscle–Specific Myosin Binding Protein-H Is Expressed in Purkinje Fibers of the Cardiac Conduction System, 665
Myosin isoform
Endothelin-1 Alters the Contractile Phenotype of Cultured Embryonic Smooth Muscle Cells, 885
Myosin light chain
Manipulating Myosin Light Chain 2 Isoforms In Vivo: A Transgenic Approach to Understanding Contractile Protein Diversity, 751
Transgenic Remodeling of the Regulatory Myosin Light Chains in the Mammalian Heart, 655

N

20:4(*n*-6)
Inhibition of Stimulus-Induced Endothelial Cell Intercellular Adhesion Molecule-1, E-Selectin, and Vascular Cellular Adhesion Molecule-1 Expression by Arachidonic Acid and Its Hydroxy and Hydroperoxy Derivatives, 149
N-terminal atrial natriuretic peptide
Combined Inhibition of Endothelin and Angiotensin II Receptors Blocks Volume Load-Induced Cardiac Hormone Release, 114
Na^+-Ca^{2+} exchange
Role of Ca^{2+} in Metabolic Inhibition-Induced Norepinephrine Release in Rat Brain Synaptosomes, 179
Na^+ channel
A Novel Tetrodotoxin-Sensitive Na^+ Current in Cultured Human Coronary Myocytes, 377
Na^+-H^+ antiport
Activity and Expression of Na^+-H^+ Exchanger Isoforms 1 and 3 in Kidney Proximal Tubules of Hypertensive Rats, 853
Modulation by pH_o and Intracellular Ca^{2+} of Na^+-H^+ Exchange in Diabetic Rat Isolated Ventricular Myocytes, 253
Na^+-H^+ Exchange Inhibition Protects Against Mechanical, Ultrastructural, and Biochemical Impairment Induced by Low Concentrations of Lysophosphatidylcholine in Isolated Rat Hearts, 95
NADPH oxidase
p22phox mRNA Expression and NADPH Oxidase Activity Are Increased in Aortas From Hypertensive Rats, 45
Neointima
Vascular Smooth Muscle Cell Cytotoxicity and Sustained Inhibition of Neointimal Formation by Fibroblast Growth Factor 2–Saporin Fusion Protein, 542
Neonatal rat heart
Conductances and Selective Permeability of Connexin43 Gap Junction Channels Examined in Neonatal Rat Heart Cells, 708
Nerves, afferent
Modulation of Renal Cortical Blood Flow During Static Exercise in Humans, 62
Newborn
Upregulation of 5′-AMP–Activated Protein Kinase Is Responsible for the Increase in Myocardial Fatty Acid Oxidation Rates Following Birth in the Newborn Rabbit, 482
N^G-nitro-L-arginine
Endogenous Nitric Oxide Masks α_2-Adrenergic Coronary Vasoconstriction During Exercise in the Ischemic Heart, 196
Nitric oxide
Characterization and Regulation of Prostaglandin E_2 Receptor and Receptor-Coupled Functions in the Choroidal Vasculature of the Pig During Development, 463
Integrin Signaling Transduces Shear Stress-Dependent Vasodilation of Coronary Arterioles, 320
Neuronal Nitric Oxide Reduces Sympathetic Excitability by Modulation of Central Glutamate Effects in Pigs, 565
Nitric Oxide Induces Heme Oxygenase-1 Gene Expression and Carbon Monoxide Production in Vascular Smooth Muscle Cells, 557
Short-term Exercise Training Enhances Reflex Cholinergic Nitric Oxide–Dependent Coronary Vasodilation in Conscious Dogs, 868
Nitric oxide synthase
Expression and Function of Recombinant Endothelial Nitric Oxide Synthase Gene in Canine Basilar Artery, 327
Expression of Inducible Nitric Oxide Synthase in Rat Experimental Autoimmune Myocarditis With Special Reference to Changes in Cardiac Hemodynamics, 11
Nitro-L-arginine
Neuronal Nitric Oxide Reduces Sympathetic Excitability by Modulation of Central Glutamate Effects in Pigs, 565
Short-term Exercise Training Enhances Reflex Cholinergic Nitric Oxide–Dependent Coronary Vasodilation in Conscious Dogs, 868
7-nitroindazole
Neuronal Nitric Oxide Reduces Sympathetic Excitability by Modulation of Central Glutamate Effects in Pigs, 565
Nonmuscle myosin
Expression of Nonmuscle Myosin Heavy Chain-B Isoform in the Vessel Wall of Porcine Coronary Arteries After Balloon Angioplasty, 514
Norepinephrine
Role of Ca^{2+} in Metabolic Inhibition-Induced Norepinephrine Release in Rat Brain Synaptosomes, 179

O

Oncogene
c-Myb–Dependent Cell Cycle Progression and Ca^{2+} Storage in Cultured Vascular Smooth Muscle Cells, 617
Oxidative phosphorylation
Intracellular Ca^{2+} Increases the Mitochondrial NADH Concentration During Elevated Work in Intact Cardiac Muscle, 82
Oxidative stress
Oxidative Stress-Induced Actin Reorganization Mediated by the p38 Mitogen-Activated Protein Kinase/Heat Shock Protein 27 Pathway in Vascular Endothelial Cells, 383
Oxidized low-density lipoprotein
Induction of P-Selectin by Oxidized Lipoproteins: Separate Effects on Synthesis and Surface Expression, 810

P

P_2 purinoceptor
Electrophysiological Consequences of Purinergic Receptor Stimulation in Isolated Rat Pulmonary Arterial Myocytes, 170
P-selectin
Induction of P-Selectin by Oxidized Lipoproteins: Separate Effects on Synthesis and Surface Expression, 810

p22phox
p22phox mRNA Expression and NADPH Oxidase Activity Are Increased in Aortas From Hypertensive Rats, 45
p38 mitogen-activated protein kinase
Oxidative Stress-Induced Actin Reorganization Mediated by the p38 Mitogen-Activated Protein Kinase/Heat Shock Protein 27 Pathway in Vascular Endothelial Cells, 383
Patch clamp
Arrhythmogenicity of IgG and Anti-52-kD SSA/Ro Affinity-Purified Antibodies From Mothers of Children With Congenital Heart Block, 354
Epoxyeicosatrienoic Acids Activate K^+ Channels in Coronary Smooth Muscle Through a Guanine Nucleotide Binding Protein, 877
PEVK region
The Giant Protein Titin: Emerging Roles in Physiology and Pathophysiology, 290
pH
The Effects of Hypoxia on pH_i in Porcine Coronary Artery Endothelium and Smooth Muscle: A Novel Method for Measurements in Endothelial Cells In Situ, 21
pH_o
Modulation by pH_o and Intracellular Ca^{2+} of Na^+-H^+ Exchange in Diabetic Rat Isolated Ventricular Myocytes, 253
Phasic and tonic contraction
Endothelin-1 Alters the Contractile Phenotype of Cultured Embryonic Smooth Muscle Cells, 885
Phenotype modulation
Integrin Very Late Antigen-4 Is Expressed in Human Smooth Muscle Cell: Involvement of α_4 and Vascular Cell Adhesion Molecule-1 During Smooth Muscle Cell Differentiation, 159
Phorbol ester
C2 Region–Derived Peptides of β-Protein Kinase C Regulate Cardiac Ca^{2+} Channels, 720
Phosphatase
Simulated Ischemia Increases the Susceptibility of Rat Cardiomyocytes to Hypercontracture, 69
Phospholamban
Targeted Ablation of the Phospholamban Gene Is Associated With a Marked Decrease in Sensitivity in Aortic Smooth Muscle, 506
Phosphorylation
Functional Effects of Protein Kinase C Activation on the Human Cardiac Na^+ Channel, 370
Involvement of Phosphorylation in Doxorubicin-Mediated Myofibril Degeneration: An Immunofluorescence Microscopy Analysis, 52
Plasminogen activator
Nitric Oxide Promotes Proliferation and Plasminogen Activator Production by Coronary Venular Endothelium Through Endogenous bFGF, 845
Plasminogen activator inhibitor type 1
Plasminogen Activator Inhibitor Type 1 and Tissue Inhibitor of Metalloproteinases-2 Increase After Arterial Injury in Rats, 490
Platelet-derived growth factor
Angiotensin II Signal Transduction in Vascular Smooth Muscle: Role of Tyrosine Kinases, 607
Positron emission tomography
Modulation of Renal Cortical Blood Flow During Static Exercise in Humans, 62
Preconditioning
Ca^{2+} As a Mediator of Ischemic Preconditioning, 790
Oxygen Radicals Can Induce Preconditioning in Rabbit Hearts, 743
The Early and Late Phases of Ischemic Preconditioning: A Comparative Analysis of Their Effects on Infarct Size, Myocardial Stunning, and Arrhythmias in Conscious Pigs Undergoing a 40-Minute Coronary Occlusion, 730
Prostaglandin
Differential Desensitization of Thromboxane A_2 Receptor Subtypes, 551
Prostaglandin E_2
Characterization and Regulation of Prostaglandin E_2 Receptor and Receptor-Coupled Functions in the Choroidal Vasculature of the Pig During Development, 463
Prostaglandin E_2 receptor subtype
Characterization and Regulation of Prostaglandin E_2 Receptor and Receptor-Coupled Functions in the Choroidal Vasculature of the Pig During Development, 463
Protease
Plasminogen Activator Inhibitor Type 1 and Tissue Inhibitor of Metalloproteinases-2 Increase After Arterial Injury in Rats, 490
Protein Kinase, 5′-AMP–activated
Upregulation of 5′-AMP–Activated Protein Kinase Is Responsible for The Increase in Myocardial Fatty Acid Oxidation Rates Following Birth in The Newborn Rabbit, 482
Protein kinase C
Angiotensin II Stimulates c-Jun NH_2-Terminal Kinase in Cultured Cardiac Myocytes of Neonatal Rats, 139
Ca^{2+} As a Mediator of Ischemic Preconditioning, 790
Differential Desensitization of Thromboxane A_2 Receptor Subtypes, 551
Functional Effects of Protein Kinase C Activation on the Human Cardiac Na^+ Channel, 370
Oxygen Radicals Can Induce Preconditioning in Rabbit Hearts, 743
Selective Activation of A_3 Adenosine Receptors With N^6-(3-Iodobenzyl)Adenosine-5′-*N*-Methyluronamide Protects Against Myocardial Stunning and Infarction Without Hemodynamic Changes in Conscious Rabbits, 800
Protein kinase C isozyme
C2 Region–Derived Peptides of β-Protein Kinase C Regulate Cardiac Ca^{2+} Channels, 720
Proteoglycan
Lipoprotein Lipase Increases Lipoprotein Binding to the Artery Wall and Increases Endothelial Layer Permeability by Formation of Lipolysis Products, 819
Proximal kidney tubule
Activity and Expression of Na^+-H^+ Exchanger Isoforms 1 and 3 in Kidney Proximal Tubules of Hypertensive Rats, 853
Pulmonary artery
Electrophysiological Consequences of Purinergic Receptor Stimulation in Isolated Rat Pulmonary Arterial Myocytes, 170
Purine nucleotide
Electrophysiological Consequences of Purinergic Receptor Stimulation in Isolated Rat Pulmonary Arterial Myocytes, 170
Purinergic stimulation
Enhancement of the ATP-Sensitive K^+ Current by Extracellular ATP in Rat Ventricular Myocytes: Involvement of Adenylyl Cyclase–Induced Subsarcolemmal ATP Depletion, 589
Purkinje fiber
Skeletal Muscle–Specific Myosin Binding Protein-H Is Expressed in Purkinje Fibers of the Cardiac Conduction System, 665

R

Rabbit hindlimb
Monocyte Chemotactic Protein-1 Increases Collateral and Peripheral Conductance After Femoral Artery Occlusion, 829
Ras
Ras Inhibits Jun-Activated Human Atrial Natriuretic Peptide Gene Transcription in Cultured Ventricular Myocytes, 580
RAS blockade
Functional and Biochemical Analysis of Angiotensin II-Forming Pathways in the Human Heart, 219
Rat skeletal muscle
Effects of *Tityus serrulatus* Scorpion Toxin γ on Voltage-Gated Na^+ Channels, 363
^{86}Rb
Increased Hepatocyte Permeability Surface Area Product for ^{86}Rb With Increase in Blood Flow, 645
Receptors, adrenergic
C2 Region–Derived Peptides of β-Protein Kinase C Regulate Cardiac Ca^{2+} Channels, 720

Reentry
Termination of Reentry by Lidocaine in the Tricuspid Ring In Vitro: Role of Cycle-Length Oscillation, Fast Use-Dependent Kinetics, and Fixed Block, 242
Regulation
Adenylyl Cyclases as Integrators of Transmembrane Signal Transduction, 297
Regulatory protein
Mechanisms of Coronary Microvascular Dilation Induced by The Activation of Pertussis Toxin-Sensitive G Proteins Are Vessel-Size Dependent: Heterogeneous Involvement of Nitric Oxide Pathway and ATP-Sensitive K^+ Channels, 1
Relaxation rate
Differential Effects of the Ca^{2+} Sensitizers Caffeine and CGP 48506 on the Relaxation Rate of Rat Skinned Cardiac Trabeculae, 682
Renal circulation
Modulation of Renal Cortical Blood Flow During Static Exercise in Humans, 62
Reperfusion
The Early and Late Phases of Ischemic Preconditioning: A Comparative Analysis of Their Effects on Infarct Size, Myocardial Stunning, and Arrhythmias in Conscious Pigs Undergoing a 40-Minute Coronary Occlusion, 730
Residence time
Residence Time of Low-Density Lipoprotein in the Normal and Atherosclerotic Rabbit Aorta, 208
Restenosis
Effect of Oligonucleotides to c-*myb* on Vascular Smooth Muscle Cell Proliferation and Neointima Formation After Porcine Coronary Angioplasty, 520
Expression of Nonmuscle Myosin Heavy Chain-B Isoform in the Vessel Wall of Porcine Coronary Arteries After Balloon Angioplasty, 514
Temporally and Spatially Coordinated Expression of Cell Cycle Regulatory Factors After Angioplasty, 418
Vascular Smooth Muscle Cell Cytotoxicity and Sustained Inhibition of Neointimal Formation by Fibroblast Growth Factor 2–Saporin Fusion Protein, 542
Retinoblastoma gene product
Angiotensin II and Serum Differentially Regulate Expression of Cyclins, Activity of Cyclin-Dependent Kinases, and Phosphorylation of Retinoblastoma Gene Product in Neonatal Cardiac Myocytes, 228
Retinoid teratology
Compartment-Selective Sensitivity of Cardiovascular Morphogenesis to Combinations of Retinoic Acid Receptor Gene Mutations, 757
Retinoid X receptor
Compartment-Selective Sensitivity of Cardiovascular Morphogenesis to Combinations of Retinoic Acid Receptor Gene Mutations, 757

S

***S*-nitroso-*N*-acetyl-penicillamine**
Neuronal Nitric Oxide Reduces Sympathetic Excitability by Modulation of Central Glutamate Effects in Pigs, 565
Saporin
Vascular Smooth Muscle Cell Cytotoxicity and Sustained Inhibition of Neointimal Formation by Fibroblast Growth Factor 2–Saporin Fusion Protein, 542
Sarcomere
Missing Pieces: Myosin Binding Protein C Truncations in Familial Hypertrophic Cardiomyopathy, 435
Sarcoplasmic reticulum
Different Compartments of Sarcoplasmic Reticulum Participate in the Excitation-Contraction Coupling Process in Human Atrial Myocytes, 345
Hydroxyl Radical Inhibits Sarcoplasmic Reticulum Ca^{2+}-ATPase Function by Direct Attack on the ATP Binding Site, 76
Targeted Ablation of the Phospholamban Gene Is Associated With a Marked Decrease in Sensitivity in Aortic Smooth Muscle, 506
Selective permeability
Conductances and Selective Permeability of Connexin43 Gap Junction Channels Examined in Neonatal Rat Heart Cells, 708
Shear stress
Suppression of Angiotensin-Converting Enzyme Expression and Activity by Shear Stress, 312
Signal transduction
Angiotensin II Signal Transduction in Vascular Smooth Muscle: Role of Tyrosine Kinases, 607
Single-channel conductance
Conductances and Selective Permeability of Connexin43 Gap Junction Channels Examined in Neonatal Rat Heart Cells, 708
Skeletal muscle
Embryonic Expression of the Gax Homeodomain Protein in Cardiac, Smooth, and Skeletal Muscle, 452
Smooth muscle
Effects of Hypoxia on pH_i in Porcine Coronary Artery Endothelium and Smooth Muscle: A Novel Method for Measurements in Endothelial Cells In Situ, 21
Embryonic Expression of the Gax Homeodomain Protein in Cardiac, Smooth, and Skeletal Muscle, 452
Expression of Nonmuscle Myosin Heavy Chain-B Isoform in the Vessel Wall of Porcine Coronary Arteries After Balloon Angioplasty, 514
Targeted Ablation of the Phospholamban Gene Is Associated With a Marked Decrease in Sensitivity in Aortic Smooth Muscle, 506
α-smooth muscle actin
Embryonic Endothelial Cells Transdifferentiate Into Mesenchymal Cells Expressing Smooth Muscle Actins In Vivo and In Vitro, 444
Smooth muscle cell
Embryonic Endothelial Cells Transdifferentiate Into Mesenchymal Cells Expressing Smooth Muscle Actins In Vivo and In Vitro, 444
Fibroblast Growth Factor-2 Potentiates Vascular Smooth Muscle Cell Migration to Platelet-Derived Growth Factor: Upregulation of $\alpha_2\beta_1$ Integrin and Disassembly of Actin Filaments, 627
Plasminogen Activator Inhibitor Type 1 and Tissue Inhibitor of Metalloproteinases-2 Increase After Arterial Injury in Rats, 490
Smooth muscle cell proliferation
The Effect of Oligonucleotides to c-*myb* on Vascular Smooth Muscle Cell Proliferation and Neointima Formation After Porcine Coronary Angioplasty, 520
Smooth muscle cell replication
Reinjury of Arterial Lesions Induces Intimal Smooth Muscle Cell Replication That Is Not Controlled by Fibroblast Growth Factor 2, 408
Smooth muscle marker
Integrin Very Late Antigen-4 Is Expressed in Human Smooth Muscle Cell: Involvement of α_4 and Vascular Cell Adhesion Molecule-1 During Smooth Muscle Cell Differentiation, 159
Smooth muscle phenotype
Endothelin-1 Alters the Contractile Phenotype of Cultured Embryonic Smooth Muscle Cells, 885
Sodium channels
Effects of *Tityus serrulatus* Scorpion Toxin γ on Voltage-Gated Na^+ Channels, 363
Functional Effects of Protein Kinase C Activation on the Human Cardiac Na^+ Channel, 370
Sodium nitroprusside
Nitric Oxide Promotes Proliferation and Plasminogen Activator Production by Coronary Venular Endothelium Through Endogenous bFGF, 845
Src
Angiotensin II Signal Transduction in Vascular Smooth Muscle: Role of Tyrosine Kinases, 607
Stress-activated protein kinase
Hypoxia/Reoxygenation Stimulates Jun Kinase Activity Through Redox Signaling in Cardiac Myocytes, 336

Stretch-activated ion channel
Non–Voltage-Gated Ca^{2+} Influx Through Mechanosensitive Ion Channels in Aortic Baroreceptor Neurons, 861
Substance P
Nitric Oxide Promotes Proliferation and Plasminogen Activator Production by Coronary Venular Endothelium Through Endogenous bFGF, 845
Supernormal conduction
Electrophysiologic Effects of Acute Myocardial Ischemia: A Mechanistic Investigation of Action Potential Conduction and Conduction Failure, 124
Sustained current
A Novel Tetrodotoxin-Sensitive Na^+ Current in Cultured Human Coronary Myocytes, 377
Swine
The Early and Late Phases of Ischemic Preconditioning: A Comparative Analysis of Their Effects on Infarct Size, Myocardial Stunning, and Arrhythmias in Conscious Pigs Undergoing a 40-Minute Coronary Occlusion, 730
Sympathetic activity
Neuronal Nitric Oxide Reduces Sympathetic Excitability by Modulation of Central Glutamate Effects in Pigs, 565
Synaptosome
Role of Ca^{2+} in Metabolic Inhibition-Induced Norepinephrine Release in Rat Brain Synaptosomes, 179

T

T lymphocyte
Lysophosphatidylcholine Increases Expression of Heparin-Binding Epidermal Growth Factor–Like Growth Factor in Human T Lymphocytes, 638
Tissue inhibitor of metalloproteinases-2
Plasminogen Activator Inhibitor Type 1 and Tissue Inhibitor of Metalloproteinases-2 Increase After Arterial Injury in Rats, 490
Titin (connectin)
The Giant Protein Titin: Emerging Roles in Physiology and Pathophysiology, 290
***Tityus serrulatus* toxin**
Effects of *Tityus serrulatus* Scorpion Toxin γ on Voltage-Gated Na^+ Channels, 363
Tolerance
Myocyte Adaptation to Chronic Hypoxia and Development of Tolerance to Subsequent Acute Severe Hypoxia, 699
Transdifferentiation
An Origin for Smooth Muscle Cells From Endothelium? 601
Transgene
Transgenic Remodeling of the Regulatory Myosin Light Chains in the Mammalian Heart, 655
Transgenic mice
Manipulating Myosin Light Chain 2 Isoforms In Vivo: A Transgenic Approach to Understanding Contractile Protein Diversity, 751
Transmembrane signaling
Adenylyl Cyclases as Integrators of Transmembrane Signal Transduction, 297
Triglyceride
Lipoprotein Lipase Increases Lipoprotein Binding to the Artery Wall and Increases Endothelial Layer Permeability by Formation of Lipolysis Products, 819
Troponin I
Role of Troponin I Proteolysis in the Pathogenesis of Stunned Myocardium, 393
Tyrosine kinase
Angiotensin II Signal Transduction in Vascular Smooth Muscle: Role of Tyrosine Kinases, 607
Integrin Signaling Transduces Shear Stress-Dependent Vasodilation of Coronary Arterioles, 320

U

Use dependence
Termination of Reentry by Lidocaine in the Tricuspid Ring In Vitro: Role of Cycle-Length Oscillation, Fast Use-Dependent Kinetics, and Fixed Block, 242

V

Vascular permeability
Exogenous Oxidized Low-Density Lipoprotein Injures and Alters the Barrier Function of Endothelium in Rats In Vivo, 37
Vascular reactivity
In Vitro Modulation of a Resistance Artery Diameter by the Tissue Renin-Angiotensin System of a Large Donor Artery, 189
Vascular smooth muscle
A Novel Tetrodotoxin-Sensitive Na^+ Current in Cultured Human Coronary Myocytes, 377
Mechanical Strain Tightly Controls Fibroblast Growth Factor-2 Release From Cultured Human Vascular Smooth Muscle Cells, 28
Vascular Thrombin Receptor Regulation in Hypertensive Rats, 838
Vascular smooth muscle cell
E-Selectin Gene Expression in Vascular Smooth Muscle Cells: Evidence for a Tissue-Specific Repressor Protein, 305
Vasculogenesis
An Origin for Smooth Muscle Cells From Endothelium? 601
Vasodilation
Mechanisms of Coronary Microvascular Dilation Induced by the Activation of Pertussis Toxin-Sensitive G Proteins Are Vessel-Size Dependent: Heterogeneous Involvement of Nitric Oxide Pathway and ATP-Sensitive K^+ Channels, 1
Velocardiofacial syndrome
Genetic Disorders of Cardiac Morphogenesis: The DiGeorge and Velocardiofacial Syndromes, 437
Ventricle
Characterization of Gap Junction Channels in Adult Rabbit Atrial and Ventricular Myocardium, 673
Ventricular myocyte
Modulation by pH_o and Intracellular Ca^{2+} of Na^+-H^+ Exchange in Diabetic Rat Isolated Ventricular Myocytes, 253
Vessel wall
Embryonic Endothelial Cells Transdifferentiate Into Mesenchymal Cells Expressing Smooth Muscle Actins In Vivo and In Vitro, 444
Vinculin
Dystrophin Is Not a Specific Component of the Cardiac Costamere, 269
Voltage clamp
Effects of *Tityus serrulatus* Scorpion Toxin γ on Voltage-Gated Na^+ Channels, 363
Volume load
Combined Inhibition of Endothelin and Angiotensin II Receptors Blocks Volume Load-Induced Cardiac Hormone Release, 114

W

Western blot
Role of Troponin I Proteolysis in the Pathogenesis of Stunned Myocardium, 393

X

Xenopus oocyte
Functional Effects of Protein Kinase C Activation on the Human Cardiac Na^+ Channel, 370